Having thus defined the invention, I claim:

1. A dual mode spreader comprising:

a hopper to hold a supply of spreadable material;

first and second discharge openings located within said hopper for which said spreadable material can flow therethrough;

an impeller mounted in a position below said hopper for rotational movement about an upright axis, said first discharge opening leading to said impeller to enable said spreadable material in said hopper to exit said hopper onto said impeller to be distributed in a path outwardly therefrom during the rotational movement of said impeller; and

a diffuser defining an inlet opening and an outlet opening, said second discharge opening in communication with said inlet opening to enable said spreadable material in said hopper to enter said diffuser and exit therefrom through said outlet opening to be distributed in a path downwardly therefrom onto the surface to be treated.

2. A dual mode spreader according to claim 1 further comprising means for controlling the flow of said spreadable material through said second discharge opening.

3. A dual mode spreader according to claim 1, wherein said diffuser further comprises a plurality of baffles and pins located within said diffuser that diffuse said spreadable material as said spreadable material falls therethrough to evenly distributed said spreadable material across the entire width of said outlet opening.

4. A dual mode spreader according to claim 2, wherein said means for controlling the flow of said spreadable material comprises a gate means, said gate means being movable between an open position wherein said spreadable material can flow through said second discharge opening and a closed position.

5. A dual mode spreader according to claim 4, wherein said gate means is incrementally adjustable between said open position and said closed position so that the flow of said spreadable material through said second discharge opening can be controlled.

6. A dual mode spreader according to claim 5, wherein said gate means further comprises easily observable indicia making it possible to accurately identify the flow rate of said spreadable material between full flow of said gate open position and no flow of said gate closed position.

7. A dual mode spreader comprising:

a hopper to hold a supply of spreadable material;

first and second discharge openings located within said hopper for which said spreadable material can flow therethrough;

an impeller mounted in a position below said hopper for rotational movement about an upright axis, said first discharge opening leading to said impeller to enable said spreadable material in said hopper to exit said hopper onto said impeller to be distributed in a path outwardly therefrom during the rotational movement of said impeller; and

a diffuser comprising a first wall and a second wall defining an inlet opening and an outlet opening, said second discharge opening in communication with said inlet opening to enable said spreadable material in said hopper to enter said diffuser and exit therefrom through said outlet opening to be distributed in a path downwardly therefrom onto the surface to be treated, and wherein said first wall is removably mounted to said second wall thereby permitting access to the interior of said diffuser.

8. A dual mode spreader according to claim 7, wherein said diffuser further comprises a plurality of baffles and pins located within said diffuser that diffuse said spreadable material as said spreadable material falls therethrough to evenly distributed said spreadable material across the entire width of said outlet opening.

9. A dual mode spreader according to claim 8 further comprising means for controlling the flow of said spreadable material through said second discharge opening.

10. A dual mode spreader according to claim 9, wherein said means for controlling the flow of said spreadable material comprises a gate means, said gate means being movable between an

open position wherein said spreadable material can flow through said second discharge opening and a closed position.

11. A dual mode spreader according to claim 10, wherein said gate means is incrementally adjustable between said open position and said closed position so that the flow of said spreadable material through said second discharge opening can be controlled.

12. A dual mode spreader according to claim 11, wherein said gate means further comprises easily observable indicia making it possible to accurately identify the flow rate of said spreadable material between full flow of said gate open position and no flow of said gate closed position.

13. A dual mode spreader capable of acting as a drop spreader or a broadcast spreader, said dual mode spreader comprising:

a hopper to hold a supply of spreadable material;

first and second discharge openings located within said hopper for which said spreadable material can flow therethrough;

first and second rate flow means for controlling the flow of said spreadable material through said first and second discharge openings respectively;

an impeller mounted in a position below said hopper for rotational movement about an upright axis, said first discharge opening leading to said impeller to enable said spreadable material in said hopper to exit said hopper onto said impeller to be distributed in a path outwardly therefrom during the rotational movement of said impeller; and

a diffuser defining an inlet opening and an outlet opening, said second discharge opening in communication with said diffuser inlet opening to enable said spreadable material in said hopper to enter said diffuser and exit said diffuser at said outlet opening to be distributed in a path downwardly therefrom onto the surface to be treated.

14. A dual mode spreader according to claim 13, wherein said diffuser further comprises a plurality of baffles and pins located within said diffuser that diffuse said spreadable material as said spreadable material falls therethrough to evenly distributed said spreadable material across the entire width of said outlet opening.

15. A dual mode spreader according to claim 14, wherein said first and second rate flow means comprise first and second gate means respectively, said first and second gate means being independently movable between an open position wherein said spreadable material can flow through said first or second discharge opening and a closed position.

16. A dual mode spreader according to claim 15, wherein said first and second gate means are incrementally adjustable between said open position and said closed position so that the flow of said spreadable material through said first and second discharge openings can be controlled.

17. A dual mode spreader according to claim 16, wherein each of said first and second gate means further comprise easily observable indicia making it possible to accurately identify the flow rate of said spreadable material between full flow of said gate open position and no flow of said gate closed position.

18. A dual mode spreader capable of acting as a drop spreader or a broadcast spreader, said dual mode spreader comprising:

a hopper to hold a supply of spreadable material;

a discharge opening located within said hopper for which said spreadable material can flow therethrough;

an impeller mounted in a position below said hopper for rotational movement about an upright axis, said discharge opening leading to said impeller to enable said spreadable material in said hopper to exit said hopper onto said impeller to distribute said spreadable material in a broadcast manner in a path outwardly therefrom during the rotational movement of said impeller; and

means for dropping said spreadable material downwardly onto the surface to be treated, said means for dropping not utilizing said impeller to distribute said spreadable material.

19. A dual mode spreader according to claim 18 further comprising:

a second discharge opening located within said hopper for which said spreadable material can flow therethrough;

said dropping means comprises a diffuser defining an inlet opening and an outlet opening, said second discharge opening in communication with said inlet opening to enable said spreadable material in said hopper to enter said diffuser and exit therefrom through said outlet opening to be distributed in a path downwardly therefrom onto the surface to be treated.

20. A dual mode spreader according to claim 19, wherein said diffuser further comprises a plurality of baffles and pins located within said diffuser that diffuse said spreadable material as said spreadable material falls therethrough to evenly distributed said spreadable material across the entire width of said outlet opening.

21. A dual mode spreader comprising:

a hopper to hold a supply of spreadable material;

at least one discharge opening located within said hopper for which said spreadable material can flow therethrough;

means for broadcasting said spreadable material onto a surface to be treated in communication with said at least one discharge opening; and

means for dropping said spreadable material onto a surface to be treated in communication with said at least one discharge opening , said dropping means being independent from said broadcasting means.

22. A dual mode spreader according to claim 21, wherein said dropping means comprises a diffuser defining an inlet opening and an outlet opening, said at least one discharge opening in communication with said inlet opening to enable said spreadable material in said hopper to enter said diffuser and exit therefrom through said outlet opening to be distributed in a path downwardly therefrom onto the surface to be treated.

23. A dual mode spreader according to claim 22, wherein said diffuser further comprises a plurality of baffles and pins located within said diffuser that diffuse said spreadable material as said spreadable material falls therethrough to evenly distributed said spreadable material across the entire width of said outlet opening.